

- 4.5.5 BURN-IN: ALL UNITS SHALL BE SUBJECTED TO 20 POWER ON-OFF CYCLES CONSISTING OF 15 MINUTES WITH POWER APPLIED AND 30 MINUTES WITHOUT POWER APPLIED AT ROOM AMBIENT TEMPERATURE. IN ADDITION, ALL UNITS SHALL BE ENERGIZED FOR A MINIMUM OF 160 HOURS WITH A 50 OHM  $\pm 10\%$  LOAD AT A TEMPERATURE OF  $80^{\circ} \pm 5^{\circ}\text{C}$ . OPERATING VOLTAGES SHALL BE  $20 \pm 1$  VDC FOR  $V_1$  AND  $15 \pm 1$  VDC FOR  $V_2$ .
- 4.5.6 THERMAL SHOCK: ALL UNITS, NON-OPERATING, SHALL BE SUBJECTED TO 25 THERMAL CYCLES FROM  $-50 \pm 5^{\circ}\text{C}$  TO  $+90 \pm 5^{\circ}\text{C}$  WITH A 1/2 HOUR MINIMUM DWELL AT EACH TEMPERATURE. THE TRANSITION TIME FROM COLD TO HOT AND HOT TO COLD SHALL BE LESS THAN 15 MINUTES. UNITS SHALL BE NON-OPERATING THROUGHOUT THIS TEST.
- 4.5.7 ALTITUDE: UNITS, NON-OPERATING, SHALL BE TESTED IN ACCORDANCE WITH MIL-O-55310 AND MIL-STD-202, TEST CONDITION C, EXCEPT ALTITUDE SHALL BE 80,350 FEET.
- 4.5.8 MOISTURE RESISTANCE: UNITS, NON-OPERATING, SHALL BE TESTED IN ACCORDANCE WITH MIL-O-55310.
- 5.0 PREPARATION FOR DELIVERY: THE PARTS SHALL BE PACKAGED IN A MANNER THAT WILL AFFORD ADEQUATE PROTECTION AGAINST CONTAMINATION, CORROSION, DETERIORATION AND PHYSICAL DAMAGE DURING SHIPMENT AND STORAGE. PARTS SHALL BE PACKAGED SO THEY WILL BE EASILY ACCESSIBLE WITHOUT DAMAGING THE PARTS.

DWG NO	277-0599	SH	12
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- 6.0 NOTES: THE INFORMATION CONTAINED IN THIS SECTION IS FOR REFERENCE ONLY.
- 6.1 IDENTIFICATION OF THE SUGGESTED SOURCE(S) OF SUPPLY HEREON IS NOT TO BE CONSTRUED AS A GUARANTEE OF PRESENT OR CONTINUED AVAILABILITY AS A SOURCE OF SUPPLY FOR THE ITEM(S).
- 6.2 DISCLAIMER: IT IS THE INTENT OF THIS DRAWING THAT THE VENDOR PART NUMBER(S) LISTED HEREIN MEET THE REQUIREMENTS SPECIFIED HEREIN. IF THE SUPPLIER OF THE PART WHEN REVIEWING THIS DRAWING DISCOVERS A DISCREPANCY IN THE REQUIREMENTS, IT IS THE SUPPLIER'S RESPONSIBILITY TO NOTIFY THE PROCURING ACTIVITY FOR CORRECTIVE ACTION.
- 6.3 HAC APPLICABILITY:  
 THIS ITEM IS UNDER HAC FOR THE FOLLOWING PROGRAMS:  
 NAVSTAR GPS  
 THIS DEVICE IS UNDER HAC FOR THOSE PROGRAMS LISTED ABOVE. OTHER USING PROGRAMS DO NOT REQUIRE EVALUATION BY THE SURVIVABILITY ENGINEERING ACTIVITY PRIOR TO SUBSTITUTION OF THIS DEVICE.
- 6.4 UNIT OF MEASURE: PIECES (PC)

SIZE	CAGEC	DWG NO	REV
A	13499	277-0599	M
SCALE NONE	i277-0599m	SHEET	12

DWG NO **277-0599** SH **13**

TABLE I  
DASH NO'S, DESCRIPTION AND VENDOR PART NUMBERS

DASH NO.	DESCRIPTION	MCCOY ELEC. PART NUMBER*	PIEZO TECH. PART NUMBER*
-010	FREQUENCY STANDARD WITH AN ADJUSTMENT PER 3.1.5.1	MC815X4-003W	X01048
-020	FREQUENCY STANDARD WITHOUT AN ADJUSTMENT PER 3.1.5.2	277-0599-020	277-0599-020

\* SEE 6.2

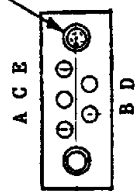
SIZE <b>A</b>	CAGEC <b>13499</b>	DWG NO <b>277-0599</b>	REV <b>M</b>
SCALE NONE	i277-0599m	SHEET <b>13</b>	

**TABLE II**  
**ELECTRICAL, MECHANICAL, AND ENVIRONMENTAL CHARACTERISTICS**

REQUIREMENT	PARAGRAPH (HEREIN)
INPUT POWER	3.1.1.3
INPUT CURRENT	3.1.1.5
FREQUENCY	3.1.2.1
RF OUTPUT POWER	3.1.2.2
WARM-UP TIME	3.1.3
SHORT TERM STABILITY	3.1.4.5
HARMONIC AND SUBHARMONIC OUTPUT	3.1.6.1
SPURIOUS OUTPUT	3.1.6.2
VIBRATION SIDEBANDS (WORST CASE AXIS)	3.1.6.4
BIT OUTPUT VOLTAGE	3.1.7.1.1 AND 3.1.7.2.1
PHYSICAL DIMENSIONS	3.2.1
WEIGHT	3.2.2
HERMETIC SEAL	4.5.4

DWG NO. SH

MALE LOCKING STUD



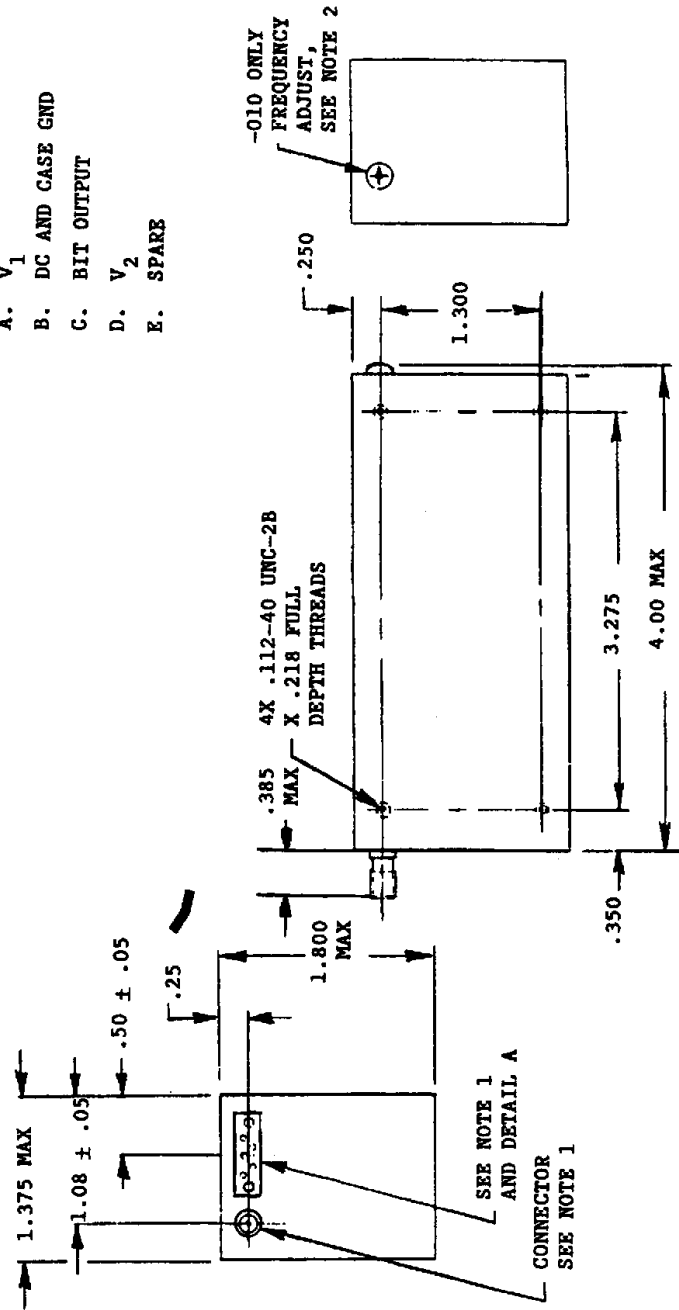
PIN FUNCTION

- A.  $V_1$
- B. DC AND CASE GND
- C. BIT OUTPUT
- D.  $V_2$
- E. SPARE

DETAIL A


NOTES:

1. REFER TO 3.2.6 FOR CONNECTOR INFORMATION.
2. FREQUENCY ADJUST MAY BE LOCATED ANYWHERE ON THIS FACE. FREQUENCY ADJUST SCREW MUST BE COVERED BY A SEAL SCREW.



MECHANICAL CONFIGURATION  
FIGURE 1

INTERPRET ALL DIMENSIONS AND TOLERANCES IN ACCORDANCE WITH ANSI Y14.5M-1982  
UNLESS OTHERWISE SPECIFIED DIM ARE IN INCHES: TOL ON: ANGLES:  $\pm 1.0^\circ$   
DECIMALS: .XX =  $\pm .02$ , .XXX =  $\pm .008$

 <b>Rockwell International</b> Collins Government Avionics Division Avionics Group Cedar Rapids, Iowa 52498			
SIZE <b>A</b>	CAGE <b>13499</b>	DWG NO. 277-0599	REV LTR K
SCALE NONE	5403p/0184p	SHEET	15